

내과적 치료를 받은 대동맥 박리와 대동맥 벽내 혈종 환자들의 자연경과에 관한 다기관 경시적 추적관찰 연구

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Multicenter Longitudinal Follow-up Clinical Study Comparing the Natural Course of Medically-Treated Patients with Aortic Dissection and Aortic Intramural Hematoma

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ABSTRACT

Background : Although the same treatment strategy has been applied for patients with aortic intramural hematoma (AIH) as typical aortic dissection (AD), the natural history of AIH with medical treatment is not known clearly. The purposes of this study were to test the hypothesis that absence of direct flow communication through intimal tear in AIH has different impact on clinical course compared with typical AD and to clarify the natural history of AIH. **Methods :** Total 181 patients of acute aortic pathology (AD/AIH = 57/124) were enrolled from 5 institutions. Patients received medical treatment without surgical intervention regardless of the affected site in acute stage, and follow-up imaging studies (FUIS) were performed in 105 patients with AIH. Clinical data of these patients were retrospectively analyzed. **Results :** Fifty-four patients showed involvement of the ascending aorta (AD/AIH = 13/41) and 127 revealed distal pathology (AD/AIH = 44/83). Compared to the patients with AD, those with AIH were older regardless of the type and showed higher incidence of pleural effusion and mediastinal hemorrhage. In-hospital mortality of proximal AIH was 7%, which was significantly lower than that of proximal AD (62%) ; mortality of distal AIH was also lower than that of distal AD (1.2 Vs 9%, $p < 0.05$). In proximal AIH, FUIS confirmed resorption of AIH in 67% (24/36) and development of AD in 25% (9/36). In distal AIH, resorption was confirmed in 78% (54/69) and development of AD in 16% (11/69). **Conclusions :** Patients with AIH showed excellent clinical course and high rate of resorption with medical treatment regardless of the affected site ; typical AD developed only in limited cases. Absence of direct flow communication through intimal tear in AIH might explain more favorable response to medical treatment than typical AD. (**Korean Circulation J 2001; 31(6):592-601**)

KEY WORDS : Aortic dissection · Aortic intramural hematoma · Natural history.

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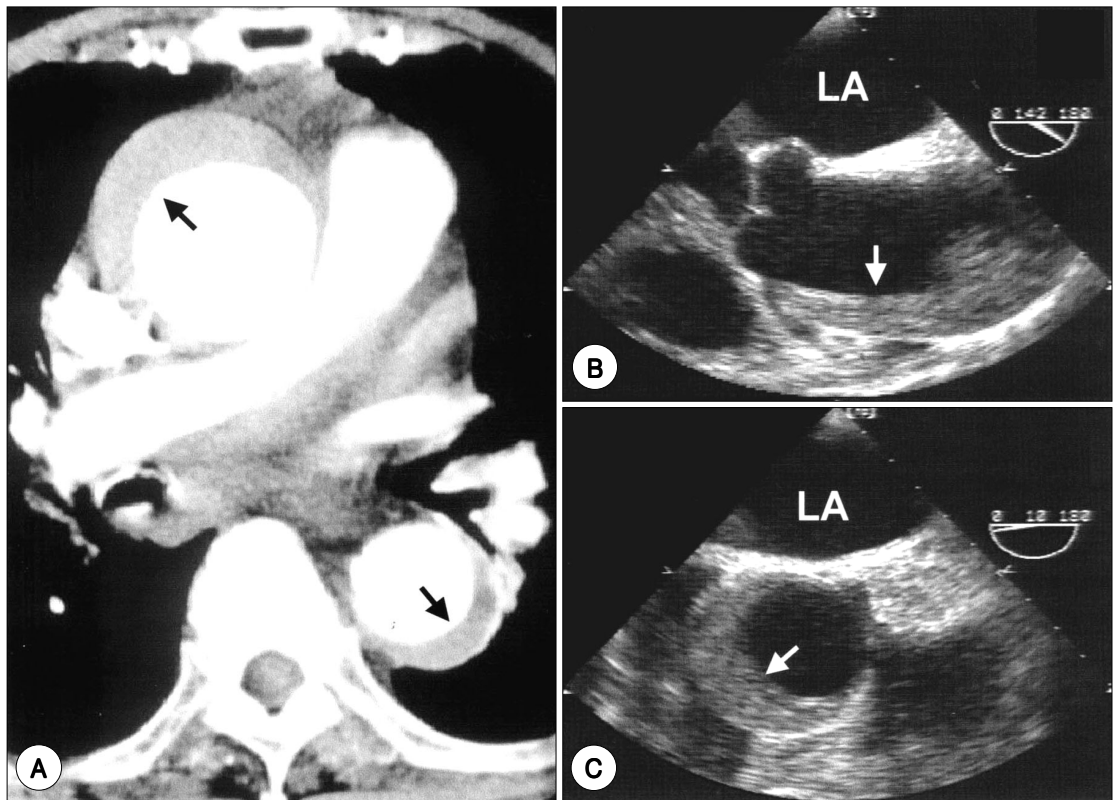


Fig. 2. Representative CT (A) and TEE (B and C) findings of typical aortic intramural hematoma ; intimal tear or flap is absent and crescentic thickening of aortic wall without contrast enhancement or flow communication is characteristic. LA : left atrium.

		가			
		AD	62%	AIH	7%
결 과		(9 Vs 1.2%, p<0.05).			
		가		124	AIH
		4	120	(/ =
		6	1999	12	38/82)
		181	가	AD가 57	(
		/ =13/44),	AIH가 124	(/
		=41/83)	가 106	가 75	. Ta-
ble 1		8%(3)			
		AIH	AD	25%	9
		(p<0.05)	AD가 ;		
		80%	AIH	Type 1	2 , 2가 3
		AD가	AD 6		
		AIH	Type 3		
		AD	3		
		AD가			

가

가 80% 가 가

가 AD

AIH

AD가

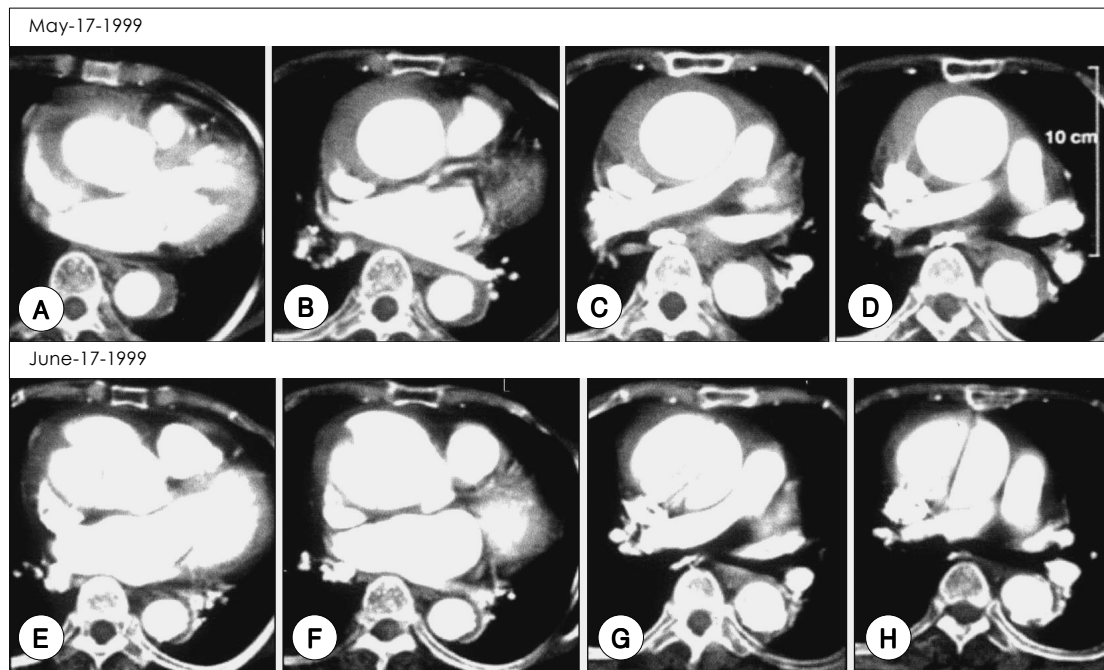


Fig. 4. An example of development of typical aortic dissection in aortic intramural hematoma with medical treatment. At initial CT (A, B, C and D), crescentic wall thickening without contrast enhancement was observed. With medical treatment, the patient's condition stabilized rapidly, and she could be discharged with oral medication. One month after the initial event, chest pain redeveloped, and follow-up CT (E, F, G and H) revealed development of typical aortic dissection in the ascending aorta.

Table 1. Clinical data of the subjects

	Proximal type		Distal type	
	AD	AIH	AD	AIH
Number	13	41	44	83
Age, year	54 ± 12	65 ± 9*	55 ± 12	62 ± 10*
Hypertension	10 (77%)	32 (78%)	35 (80%)	66 (80%)
Syncope	3 (23%)	4 (10%)	3 (6.8%)	3 (3.6%)
Marfan's syndrome	2 (15%)	0	1 (2.3%)	0
Pericardial effusion	5 (38%)	24 (59%)	1 (2.3%)	9 (11%)
Pleural effusion	0	26 (63%)*	9 (20%)	37 (45%)*
Mediastinal hemorrhage	0	5 (12%)	1 (2.3%)	16 (19%)*
Azotemia (Cr > 1.4 mg/dl)	4 (31%)	10 (24%)	6 (14%)	7 (8.4%)
In-hospital death	8 (62%)	3 (7%)*	4 (9%)	1 (1.2%)*

Cr : creatinine, * : $p < 0.05$, AD Vs AIH

가 AIH에서 가강과 진강 사이의 혈류소통 여부가 예후 및 자연경과에 미치는 효과

	Proximal	Distal
Number	38	82
Follow-up rate	36/38 (95%)	69/82 (84%)
Follow-up duration, months	7.4 ± 2.2	6.3 ± 1.0
Resorption	24 (67%)	54 (78%)
Aggravation	3 (8%)	2 (3%)
Development of AD	9 (25%)	11 (16%)
Classic AD (type I/II/III)	6 (2/3/1)	0
Localized AD	3	11
No Change	0 (0%)	2 (3%)

가

AIH AD

가

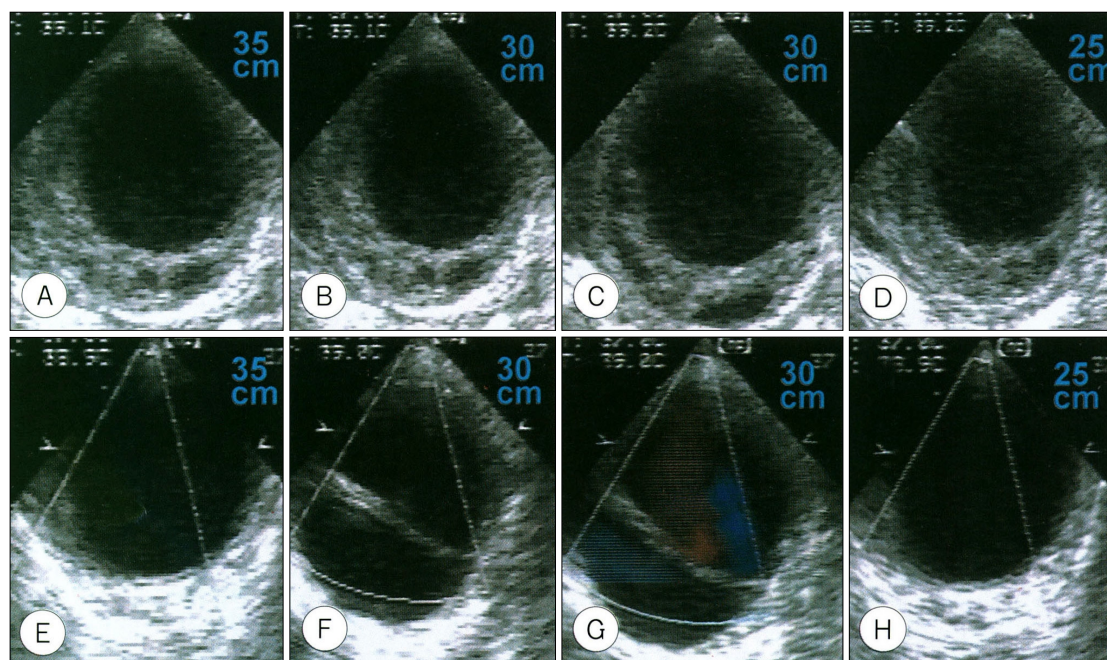
AIH

AD

가

Dinsmore

가



598

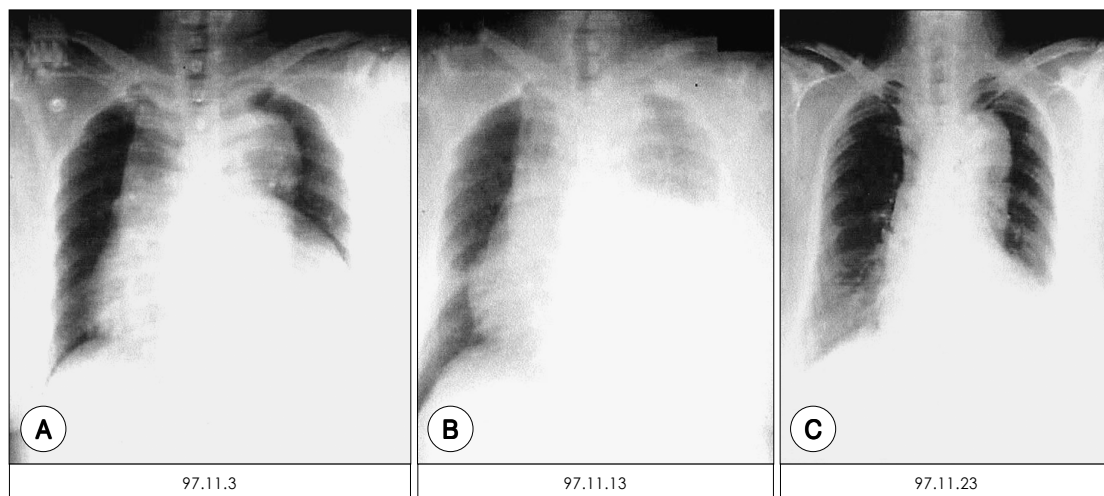


Fig. 6. Serial chest X-ray films showing dramatic decrease of mediastinal widening and left pleural effusion in a patient with proximal aortic intramural hematoma treated medically.

Table 3. Clinical data of patients with proximal AIH reported in the literature

Author	Year	Case number	Mean age	Mortality with medical treatment	Resorption with medical treatment	Country	Reference number
Mohr-Kahaly	1994	3	72	67% (2/ 3)	NA	Germany	3
Nienaber	1995	12	52	80% (4/ 5)	NA	Germany	5
Sueyoshi	1997	13	70	13% (1/ 8)	50% (4/ 8)	Japan	17
Kaji	1999	22	65	5% (1/22)	55% (12/22)	Japan	18
Shimizu	2000	13	NA	27% (3/11)	NA	Japan	19
Song	2001	24	67	6% (1/18)	54% (7/13)	Korea	11
Current study		41	65	7% (3/41)	67% (24/36)	Korea	

NA : not available

AD 가
¹²⁾ Ergin 가 38 AIH AD
 AD 47% 18 ¹⁰⁾ 가
 가 4.4 9
 가
 (28 8% AIH AD
 Vs 5%, p<0.05).¹³⁾ TEE 6% 58%
^{14 - 16)} 가 가
 AIH 가
 AIH AD
¹¹⁾

AIH 10% AD 본 논문의 문제점
 70% 가 AIH 가
 Mohr - Kahaly ³⁾ Nienaber ⁵⁾
 AIH 가 AD 가
 70% AD 가
 AD 가
 17 - 19) AIH
 6 23% 62%
 (Table 3). AIH 60 AD 58% 가 ²⁰⁾
 가 가
 요 약
 AIH
 연구목적 :
 (aortic intramural hematoma, AIH)
 (aortic dissection,
 AD)
 AIH
 AIH
 AD 70% AIH AD
 가
 (78/105)
 AD 19%(20/105)
 . AD
 가 AIH 2/3 5
 (AD/AIH = 57/124)
 AD가 AIH
 AD가 AIH 50% 가 105 AIH
 가
 결 과 :
 (Table 3) 가 AD AIH = 13/41) 127 (AD/AIH = 44/83). AD
 AIH

AIH 7% AD 62%
 AIH AD
 (1.2 Vs 9%, p<0.05). AIH
 67%(24/36)
 25%(9/36) AD가
 ; AIH 78%(54/69)
 가 16%(11/69) AD가
 결 론 :
 AIH
 AD
 AIH
 AD
 중심 단어 :

1998

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